Hogan & Hartson 81880.0142 Takeshi OKAMURA et al. Multi-Layer Piezoelectric Element EV 667 730 949 US 9 Drawing Sheets; Sheet 1 of 9

Fig. 1A

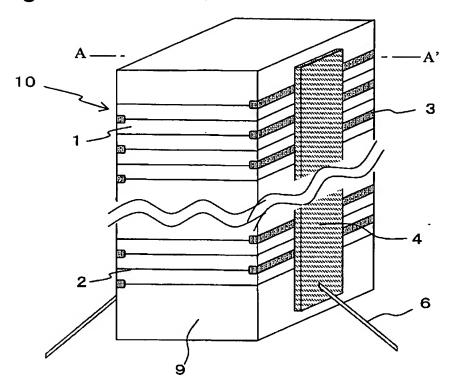
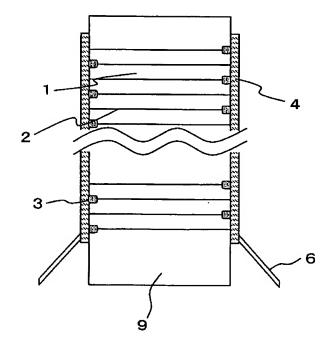


Fig. 1B



Hogan & Hartson 81880.0142 Takeshi OKAMURA et al. Multi-Layer Piezoelectric Element EV 667 730 949 US 9 Drawing Sheets; Sheet 2 of 9

Fig. 2A

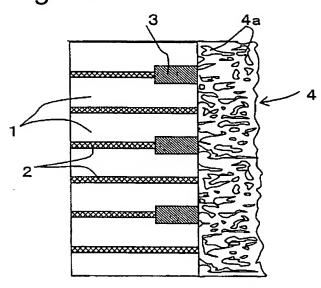
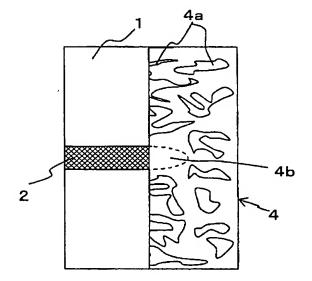
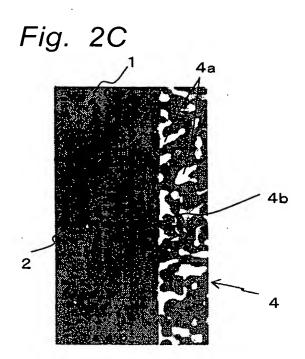
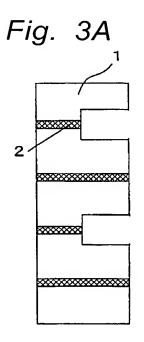


Fig. 2B



Hogan & Hartson 81880.0142 Takeshi OKAMURA et al. Multi-Layer Piezoelectric Element EV 667 730 949 US 9 Drawing Sheets; Sheet 3 of 9





Hogan & Hartson 81880.0142 Takeshi OKAMURA et al. Multi-Layer Piezoelectric Element EV 667 730 949 US 9 Drawing Sheets; Sheet 4 of 9

Fig. 3B

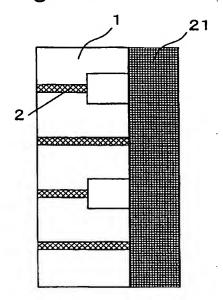
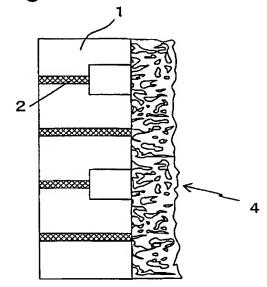


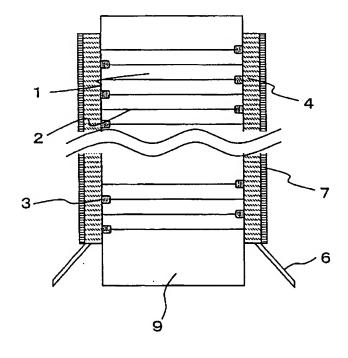
Fig. 3C



Hogan & Hartson 81880.0142 Takeshi OKAMURA et al. Multi-Layer Piezoelectric Element EV 667 730 949 US 9 Drawing Sheets; Sheet 5 of 9

Fig. 4A

Fig. 4B



Hogan & Hartson 81880.0142 Takeshi OKAMURA et al. Multi-Layer Piezoelectric Element EV 667 730 949 US 9 Drawing Sheets; Sheet 6 of 9

Fig. 4C

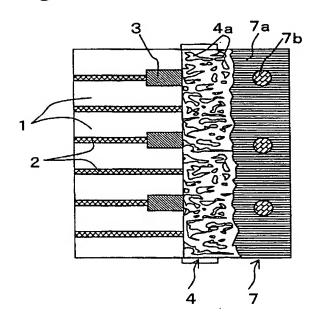
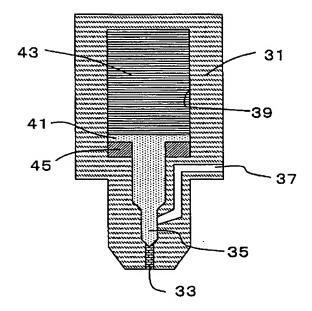


Fig. 5



Hogan & Hartson 81880.0142 Takeshi OKAMURA et al. Multi-Layer Piezoelectric Element EV 667 730 949 US 9 Drawing Sheets; Sheet 7 of 9

Fig. 6

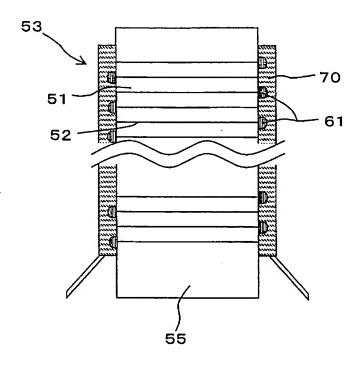
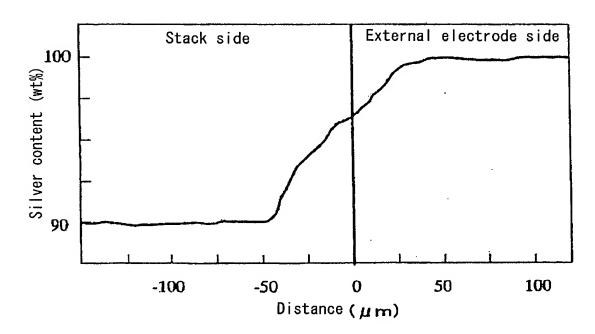


Fig. 7



Hogan & Hartson 81880.0142 Takeshi OKAMURA et al. Multi-Layer Piezoelectric Element EV 667 730 949 US 9 Drawing Sheets; Sheet 8 of 9

Fig. 8A

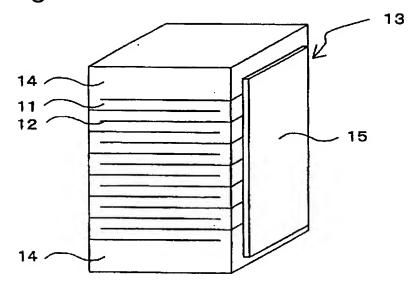
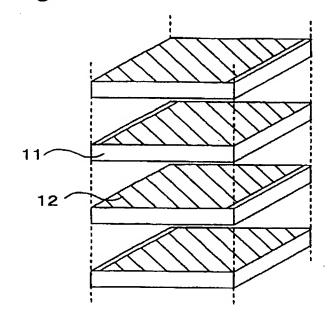


Fig. 8B



Hogan & Hartson 81880.0142 Takeshi OKAMURA et al. Multi-Layer Piezoelectric Element EV 667 730 949 US 9 Drawing Sheets; Sheet 9 of 9

Fig. 9

